

# **Product Evaluation**

WIN2243 | 1017

**Engineering Services Program** 

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

**Evaluation ID:** WIN-2243 **Effective Date:** October 1, 2017

**Re-evaluation Date:** October 2021

Product Name: H3 2.0 Aluminum Clad Vinyl Wood Main Frame, Aluminum Clad Wood Sashes,

Casement Windows, Combinations, Fin Installation, Non-Impact Resistant

**Manufacturer:** Sierra Pacific Windows

575 South Whelen Avenue

Medford, WI 54451 (715) 748-2011

#### **General Description:**

System	Description	Label Rating	Design Pressure Rating
1	Casement Operator Three-Wide with Three-Wide Transom Combination	LC-PG25 105.5 X 47.5-MA LC-PG25 106 x 95-C	+25 / -25 psf
2	Casement Operator Two-Wide with Two-Wide Transom Combination  LC-PG35 70.5 X 47.5-MA LC-PG35 71 x 95-C  +35 / -3		+35 / -35 psf
3	Casement Operator Two-Wide with Two-Wide Transom Combination; HPLC-PG45 70.5 X 47.5-MALC-PG45 71 x 95-C		+45 / -45 psf
4	Casement Operator / Casement Fixed / Casement Operator Combination	LC-PG35 118 x 72-C	+35 / -35 psf
5	Casement Operator / Casement Fixed / Casement Operator Combination; HP	LC-PG50 118 x 72-C	+50 / -55 psf
6	Casement Operator / Casement Picture / Casement Operator with Three-Wide Transom Combination	LC-PG35 105.5 X 47.5-MA LC-PG35 106 x 95-C	+35 / -35 psf

## **General Description (Continued):**

System	Description	Label Rating	Design Pressure Rating
7	Casement Operator Two-Wide with Two- Wide Transom Combination	LC-PG50 70.5 X 47.75-MA LC-PG50 71 x 95-C	+50 / -50 psf
8	Casement Operator / Casement Picture / Casement Operator with Three-Wide Transom Combination; HP	LC-PG45 105.5 X 47.5-MA LC-PG45 106 x 95-C	+45 / -45 psf
9	Casement Operator / Casement Fixed / Casement Operator Combination; HP	R-PG50 106 x 84-C	+50 / -55 psf
10	Casement Operator / Casement Fixed / Casement Operator Combination	R-PG35 106 x 84-C	+35 / -35 psf
11	Casement Operator / Casement Picture / Casement Operator with Three-Wide Transom Combination; Steel Mull	LC-PG50 105.5 X 49.75-MA LC-PG50 106 x 99-C	+50 / -50 psf

## **Product Dimensions:**

System	Overall Size	Casement Sash Size	Picture/Transom Sash Size
1	105-1/2" x 95"	33-3/4" x 69-3/4"	Transom Sash: 33-3/4" x 21-3/4"
2	70-1/2" x 95"	33-13/16" x 69-3/4"	Transom Sash: 33-13/16" x 21-3/4"
3	70-1/2" x 95"	33-13/16" x 69-3/4"	Transom Sash: 33-13/16" x 21-3/4"
4	117-1/2" x 71-1/2"	27-3/4" x 69-3/4"	Picture Sash: 57-3/4" x 69-3/4"
5	117-1/2" x 71-1/2"	27-3/4" x 69-3/4"	Picture Sash: 57-3/4" x 69-3/4"
6	105-1/2" x 95-1/4"	33-3/4" x 69-3/4"	Picture/Transom Sash: 33-3/4" x 21-3/4"
7	70-1/2" x 95-1/4"	33-3/4" x 69-3/4"	Transom Sash: 33-3/4" x 21-3/4"
8	105-1/2" x 95-1/4"	33-3/4" x 69-3/4"	Picture Sash: 33-3/4" x 69-3/4" Transom Sash: 33-3/4" x 21-3/4"
9	105-1/2" x 83-1/2"	34" x 81-3/4"	Picture Sash: 34" x 81-3/4"
10	105-1/2" x 83-1/2"	34" x 81-3/4"	Picture Sash: 34" x 81-3/4"
11	105-1/2" x 99-1/4"	33-3/4" x 69-3/4"	Picture Sash: 33-3/4" x 69-3/4" Transom Sash: 33-3/4" x 25-3/4"

# **Product Identification (Certification Label on Window):**

System		•	
	Certification Agency	WDMA	
1, 2, 7	Manufacturer's Name or Code Name	Sierra Pacific Windows	
	Product Name	H3 2.0 Casements w/Transoms	
	Took Chandanda	AAMA/WDMA/CSA 101/I.S.2/A440-11	
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08	
	Certification Agency	WDMA	
	Manufacturer's Name or Code Name	Sierra Pacific Windows	
3	Product Name	H3 2.0 Casements w/Transom (HP)	
	Tost Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11	
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08	
	Certification Agency	WDMA	
	Manufacturer's Name or Code Name	Sierra Pacific Windows	
4	Product Name	H3 2.0 Casements/Picture/Casement	
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11	
	Certification Agency	WDMA	
_	Manufacturer's Name or Code Name	Sierra Pacific Windows	
5	Product Name	H3 2.0 Casements/Picture/Casement (HP)	
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11	
	Certification Agency	WDMA	
	Manufacturer's Name or Code Name	Sierra Pacific Windows	
6	Product Name	H3 2.0 Casements/Picture/Casement	
U	r roduct Name	w/Transoms	
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11	
	rest standards	AAMA/WDMA/CSA 101/I.S.2/A440-08	
	Certification Agency	WDMA	
	Manufacturer's Name or Code Name	Sierra Pacific Windows	
8	Product Name	H3 2.0 Casements/Picture/Casement	
		w/Transoms (HP)	
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11	
		AAMA/WDMA/CSA 101/I.S.2/A440-08	
9	Certification Agency	WDMA	
	Manufacturer's Name or Code Name	Sierra Pacific Windows	
	Product Name	H3 2.0 Casements (HP)	
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11	
10	Certification Agency	WDMA	
	Manufacturer's Name or Code Name	Sierra Pacific Windows	
	Product Name	H3 2.0 Casements	
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11	

## Product Identification (Certification Label on Window) - continued:

System		
	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Sierra Pacific Windows
11	Product Name	H3 2.0 Casement/Picture/Casement
	Product Name	w/Transoms (Steel Mull)
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-11

#### **Impact Resistance:**

System	Impact Resistant	Requirement
1-11	NO	Provide an impact protective system when installing the product
		in areas that require windborne debris protection.

**Acceptance of Smaller Assemblies:** Window assemblies with dimensions equal to or smaller than those specified are acceptable with the limitations specified in this report.

## Installation:

System		
1, 2, 4	Type of Installation	Fin Installation
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners	Minimum No. 8 PPH screws
1, 2, 4	Fastener Location/Spacing	Locate fasteners approximately 2" from each corner and
		approximately 6" on center along the perimeter.
	Fastener Penetration	Minimum 1-1/2" into the wall framing
	Type of Installation	Fin Installation
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners	Minimum No. 8 PPH screws
3	Fastener Location/Spacing	Locate fasteners approximately 2" from each corner and approximately 6" on center along the perimeter.  Installation Clips: 1.5" x 5"-8" x 20 gauge galvanized steel. One located at the sill mull post location and at each end of the horizontal mull location. Secured to the window frame with one No. 8 x 2-1/2" PH SMS and to the wall framing with two No. 8 PPH screws.

# Installation (Continued):

System			
	Type of Installation	Fin Installation	
	Wall Framing	Spruce-Pine-Fir Dimension lumber	
5	Fasteners	Minimum No. 8 PPH screws	
	Fastener Location/Spacing	Locate fasteners approximately 2" from each corner and approximately 6" on center along the perimeter.  Installation Clips: 1.5" x 5"-8" x 20 gauge galvanized steel.  One located at each vertical head and sill mull post location. Secured to the window frame with one No. 8 x 2-1/2" PH SMS and to the wall framing with two No. 8  PPH screws.	
	Type of Installation	Fin Installation	
	Wall Framing	Spruce-Pine-Fir Dimension lumber	
6	Fasteners	Minimum No. 8 PPH screws	
	Fastener Location/Spacing	Locate fasteners approximately 2" from each corner and approximately 3-1/2" on center along the perimeter.	
	Fastener Penetration	Minimum 1-1/2" into the wall framing	
	Type of Installation	Fin Installation	
	Wall Framing	Spruce-Pine-Fir Dimension lumber	
7, 9	Fasteners	Minimum No. 8 PPH screws	
7, 9	Fastener Location/Spacing	Locate fasteners approximately 2" from each corner and approximately 8" on center along the perimeter.	
	Fastener Penetration	Minimum 1-1/2" into the wall framing	
	Type of Installation	Fin Installation	
	Wall Framing	Spruce-Pine-Fir Dimension lumber	
	Fasteners	Minimum No. 8 PPH screws	
10	Fastener Location/Spacing	Locate fasteners approximately 2" from each corner and approximately 8" on center along the perimeter.  Installation Clips: 1.5" x 5"-8" x 20 gauge galvanized steel.  One located at each vertical head and sill mull post location. Secured to the window frame with one (1) No. 8 x 2-1/2" PH SMS and to the wall framing with two (2)  No. 8 PPH screws.	

# Installation (Continued):

System			
	Type of Installation	Fin Installation	
	Wall Framing	Spruce-Pine-Fir Dimension lumber	
	Fasteners	Minimum No. 8 PPH screws	
8	Fastener Location/Spacing	Locate fasteners approximately 2" from each corner and approximately 3-1/2" on center along the perimeter. Installation Clips: 1.5" x 5"-8" x 20 gauge galvanized steel. One located at the vertical head mull post location of the transom, one located at the vertical sill mull location of the casement and one located at the horizontal mull location at each end. Secured to the window frame with one No. 8 x 2-1/2" PH SMS and to the wall framing with two No. 8 PPH screws	
	Fastener Penetration	Minimum 1-1/2" into the wall framing	
	Type of Installation	Fin Installation	
	Wall Framing	Spruce-Pine-Fir Dimension lumber	
	Fasteners	Minimum No. 8 PPH screws	
11	Fastener Location/Spacing	Locate fasteners approximately 3" from each corner and approximately 7" on center along the perimeter.  Installation Clips: 1.5" x 5"-8" x 20 gauge galvanized steel. One located at the vertical head mull post location of the transom, one located at the vertical sill mull location of the casement and one located at the horizontal mull location at each end. Secured to the window frame with one No. 8 x 2-1/2" PH SMS and to the wall framing with two No. 8 PPH screws	
	Fastener Penetration	Minimum 1-1/2" into the wall framing	

**Note:** Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.